



Federal Communications Commission  
Washington, D.C. 20554

DA 05-1115

April 21, 2005

Susan H. Crandall  
Intelsat Global Service Corporation  
3400 International Drive, NW  
Washington, DC 20008

Re: Intelsat LLC, Application to Modify Authorization for the INTELSAT 602 satellite; SAT-MOD-20050208-00027; Call Sign: S2389

Dear Ms. Crandall:

On February 8, 2005, Intelsat LLC (Intelsat) filed a modification request seeking authority to relocate the INTELSAT 602 satellite from the 50.5° E.L. orbital location to the 150.5° E.L. orbital location and operate in the C- and Ku-frequency bands at that location.<sup>1</sup> In its application, Intelsat noted that it was currently authorized by the FCC to drift the INTELSAT 602 satellite to the 157° E.L. orbital location and now requested authority to stop the satellite at the 150.5° E.L. orbital location and operate at this location.<sup>2</sup> Intelsat also stated that the Administration of Indonesia currently has C- and Ku-band ITU filings at the 150.5° E.L. orbital location.<sup>3</sup> Further, Intelsat explained that Indosat, a private company, holds a concession from the Administration of Indonesia to operate a satellite at that location. Intelsat has entered into a private agreement with Indosat to operate the INTELSAT 602 satellite at the 150.5° E.L. orbital location in the C- and Ku frequency bands.<sup>4</sup> For the reasons we explain below, we dismiss the modification application as defective without prejudice to refiling.

Section 25.114(c) of the Commission's rules<sup>5</sup> requires all space station applicants to submit all applicable items of information listed in its subsections. In the *First Space Station Reform Order*,<sup>6</sup> the

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<sup>1</sup> See Intelsat LLC, Application to Modify Authorization for the INTELSAT 602 satellite; File No. SAT-MOD-20050208-00027; Call Sign: S2389 (INTELSAT 602 Application).

<sup>2</sup> See INTELSAT 602 Application at p. 1.

<sup>3</sup> According to Intelsat, the ITU filings of Indonesia for the Palapa-C4 satellite networks specifically include the 3625-4298 and 5927-6423 MHz frequency bands (C-band) and the 10952-11200, 11450-11688, and 14252-14488 MHz frequency bands (Ku-band). See INTELSAT 602 Application at p. 2.

<sup>4</sup> We note that the INTELSAT 602 satellite includes frequencies in the C-band, specifically the 5850-5925 MHz frequency band that is not included in Indonesia's ITU filings.

<sup>5</sup> 47 C.F.R. § 25.114(c).

<sup>6</sup> Amendment of the Commission's Space Station Licensing Rules and Policies, *First Report and Order and Further Notice of Proposed Rulemaking*, IB Docket No. 02-34, 18 FCC Rcd 10760, 10852 ¶ 244 (2003) (*First Space Station Reform Order*); International Bureau to Streamline Satellite and Earth Station Processing, *Public Notice*, Report No. SPB-140, October 28, 1998 (emphasizing the obligation to comply with 47 C.F.R. § 24.114(c) and stating that applications that did not comply would be dismissed). Since the *First Space Station Reform Order* was adopted, the Bureau has strictly enforced its Part 25 rules and has returned over 20 applications as defective. See

Commission affirmed the policies embodied in this rule by continuing to require applications to be substantially complete when filed.<sup>7</sup> As the Commission noted, these procedures and rules will enable it to establish satellite licensees' operating rights clearly and quickly and, as a result, allow licensees to provide service to the public much sooner than might be possible under the previous licensing procedures.<sup>8</sup>

Intelsat's modification did not include all the information required under Section 25.114. Specifically, Section 25.140(b)(2) of the Commission's rules requires an interference analysis demonstrating that the proposed GSO FSS satellite system will be compatible with the Commission's two-degree orbital spacing environment.<sup>9</sup> In its application, Intelsat provided an interference analysis reflecting three operational satellites within +/- 3 degrees of the 150.5° E.L. orbital location. These satellites included MEASAT, a C/Ku band satellite located at the 148° E.L. orbital location, JCSAT-1B, a Ku-band satellite located at the 150° E.L. orbital location, and Optus-B3, a L/Ku-band satellite located at the 152° E.L. orbital location. Upon technical review we find that Intelsat has failed to provide an adequate interference analysis of INTELSAT 602 satellite operations with regard to the JCSAT-1B, Optus-B3 and MEASAT satellites.

With regard to the JCSAT-1B satellite, Intelsat acknowledges that the Indosat satellite uplink frequencies in the 14.25-14.5 GHz band overlap with the JCSAT-1B satellite.<sup>10</sup> However, Intelsat does not indicate that the Indonesian Administration has a coordination agreement with the Administration of Japan for those operations. Additionally, Intelsat fails to provide the technical parameters of the JCSAT-1B satellite or the required spatial separation required, to show that interference will not be caused to that satellite. Rather, Intelsat states that it "undertakes to operate co-frequency, co-pol uplinks in 14.25-14.5 GHz band from our Ku spot only if so positioned as to provide the required spatial isolation to JSAT's coverage so as not to cause excess interference."<sup>11</sup> (Emphasis added) This does not obviate the need for Intelsat to file the required interference analysis nor does it in any event demonstrate that Intelsat will not cause harmful interference to the JCSAT-1B satellite.

Additionally, with respect to the Optus-B3 satellite, Intelsat fails to provide an adequate interference analysis. Specifically, Intelsat notes that the uplink frequencies for the Indosat satellite (at 150.5° E.L.) overlap with that of Optus-B3 (at 152° E.L.) in the 14.25-14.5 GHz frequency band.<sup>12</sup>

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Echostar Satellite LLC, Application for Authority to Construct, Launch and Operate a Geostationary Satellite in the Fixed Satellite Service Using the Extended Ku-Band Frequencies at the 101° W.L. Orbital Location, *Order on Reconsideration*, DA 04-4056, para. 14 (rel. Dec. 27, 2004) (contains a partial listing of dismissed applications).

<sup>7</sup> *First Space Station Reform Order*, 18 FCC Rcd at 10852 para. 244 (citing Amendment of the Commission's Space Station Licensing Rules and Policies, *Notice of Proposed Rulemaking*, 17 FCC Rcd at 3875 (para. 84) (2002)).

<sup>8</sup> *First Space Station Reform Order*, 18 FCC Rcd at 10765-66 para. 4.

<sup>9</sup> 47 C.F.R. § 25.140(b)(2).

<sup>10</sup> See Intelsat 602 Application at Technical Appendix, p. 5. We note that the Indosat satellite does not have the same technical characteristics as the INTELSAT 602 satellite. Intelsat states in its application that Indosat, a private company, holds a concession from the Administration of Indonesia to operate a satellite in the C- and Ku frequency bands at the 150.5° E.L. location, however we note that we do not have access that document.

<sup>11</sup> See INTELSAT 602 Application at Technical Appendix, p. 5.

<sup>12</sup> *Supra* note 7. See also INTELSAT 602 Application, Technical Appendix, p. 6.

However, Intelsat does not indicate that the Indonesian Administration has a coordination agreement with the Australian Administration for those operations. Instead, Intelsat notes that there is an existing coordination agreement between Intelsat at 157° E.L. and AUSSAT at 156° E.L. which enables Intelsat to operate an Intelsat satellite in the 14.25-14.5 GHz frequency band at an off-axis eirp density towards 156° E.L. of -14.5 dBW/Hz and 44.7 dBW/40 MHz. Therefore, Intelsat alleges that because the separation between the INTELSAT 602 satellite and the Optus-B3 satellite would be 1.5 degrees, Intelsat can operate its INTELSAT 602 satellite at the 150.5° E.L. orbital location with a permissible off-axis eirp density towards 152° E.L. of -10.1 dBW/Hz and 49.1 dBW/40 Mhz.<sup>13</sup> We disagree with Intelsat's conclusion and find that an existing coordination agreement between Intelsat (at 157° E.L.) and AUSSAT (at 156° E.L.) does not substitute for a coordination agreement between Intelsat (at 150.5° E.L.) and Optus B3 (at 152° E.L.). Further, Intelsat is nonetheless required to file an interference analysis to demonstrate that the INTELSAT 602 satellite operations at the 150.5° E.L. orbital location will not cause harmful interference to the Optus B3 satellite at the 152° E.L. orbital location. Therefore, we disagree with Intelsat's conclusion and find that Intelsat has not shown how its operations on INTELSAT 602 will not interfere with the Optus-B3 satellite's operations.

Intelsat also fails to provide an adequate interference analysis with respect to the MEASAT satellite. In its application, Intelsat acknowledges that the INTELSAT 602 satellite at the proposed 150.5° E.L. orbital location will have a full frequency overlap with the MEASAT satellite at 148° E.L.<sup>14</sup> However, Intelsat also notes that the Administration of Indonesia has already reached a coordination agreement with Malaysia and the INTELSAT 602 will operate within those coordination constraints. Intelsat then provides the technical specifications for co-coverage, co-frequency, and co-pol operations. However, in review of this information, we find that Intelsat fails to provide complete uplink power spectral density (psd) values for its C- and Ku- band operations. Instead Intelsat provides an equation containing an unknown value of "X".<sup>15</sup> In the event that Intelsat wishes to refile its application, we request that Intelsat clarify this information and provide values and explanation for "X". Additionally, we request Intelsat to explain the basis for the stated technical specifications for co-coverage, co-frequency, and co-pol operations. Specifically, whether these values are based on the technical parameters agreed to in the coordination agreement between the Indonesian and Malaysian Administrations and/or the maximum operational levels of the INTELSAT 602 satellite.

We have repeatedly advised applicants that failure to submit a two-degree interference analysis renders the application incomplete.<sup>16</sup> Consequently, we find that Intelsat's modification request, File No.

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<sup>13</sup> See INTELSAT 602 Application, Technical Appendix, p. 6

<sup>14</sup> *Id* at p. 3.

<sup>15</sup> *Id* at p. 4. Specifically, Intelsat provides the following equations for Uplink psd, C-band:  $-47$  to  $-45 + X$ , and Ku-band:  $-50 + X$  dBW/Hz.

<sup>16</sup> *Public Notice*, International Bureau Satellite Division Information: Clarification of 47 C.F.R. § 25.140(b)(2), Space Station Application Interference Analysis, No. SPB-195, 18 FCC Rcd 25099 (2003) (*Interference Analysis Public Notice*); *Public Notice*, International Bureau Satellite Division Information: Clarification of 47 C.F.R. 25.140(b)(2), Space Station Interference Analysis, SPB-207, DA 04-1708, (rel. June 16, 2004) (*Second Interference Analysis Public Notice*).

SAT-MOD-20050208-00027, is defective and pursuant to the Commission's rules on delegated authority, 47 C.F.R. § 0.261(a)(4), we DISMISS the application without prejudice to refiling.<sup>17</sup>

Additionally, while we dismiss the application on the above basis, we take this opportunity to apprise Intelsat of some issues it may wish to address should it choose to refile its application. We remind Intelsat that pursuant to ITU Radio Regulation 18.1 "[n]o transmitting station may be established or operated by a private person or by any enterprise without a license issued in an appropriate form and in conformity with the provisions of these Regulations by or on behalf of the government of the country to which the station in question is subject ...." We note however, that the agreement between Intelsat and Indosat states that the Indonesian Administration shall remain the sole registered user of the 150.5° E.L. orbital location for purposes of ITU's Radio Regulatory Processes. In refiling its application, we request that Intelsat provide clarification in this matter. Specifically, we request that Intelsat obtain an acknowledgment from the Indonesian Administration of the understanding that the United States Federal Communications Commission will remain the licensing administration and the notifying administration with respect to operations of the INTELSAT 602 satellite, including operations at the 150.5° E.L. orbital location.<sup>18</sup> We also request that Intelsat submit a copy of any written authorizations or concessions issued to Indosat concerning operations of the INTELSAT 602 satellite at the 150.5° E.L. orbital locations.

If you have any questions, please do not hesitate to call Jabin Vahora of my staff at (202) 418-1229.

Sincerely,

Thomas S. Tycz  
Chief  
Satellite Division

cc: Carl R. Frank  
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<sup>17</sup> We note that if Intelsat refiles an application identical to the one dismissed, with the exception of supplying the missing information, it need not pay a further application fee. See 47 C.F.R. §1.1109(d).

<sup>18</sup> See PanAmSat Licensee Corporation, Application for Modification of License for the PAS 9 Satellite, *Order and Authorization*, 19 FCC Rcd. 16,642, 16,644, para. 6. fn 19 (2004). PanAmSat provided an e-mail from Nashaat M. Waheeb, Director, Satellite Control Network, Arabsat, stating that "Saudi Arabia, being the notifying administration for ARABSAT, has licensed ARABSAT to operate its systems' satellites at 26° E.L.. Saudi Arabia has not, however, licensed PanAmSat's operation of PAS-5 at 26.15° E.L., which we recognize is governed by the authorization provided by the U.S. Federal Communications Commission."